

## **REMARKS**

Claims 1, 2, 4-14, and 16 - 46 are pending in this application. Claims 27-42 have been withdrawn from consideration pursuant to a restriction requirement. Claims 1, 2, 4-14, 16-26 and 43-46 stand rejected. Favorable reconsideration is respectfully requested in view of the following remarks.

### **I. Rejection under 35 USC 112, second paragraph**

The pending claims have been rejected under the second paragraph of Section 112 for being indefinite. Reconsideration is respectfully requested.

In particular, the Examiner states that the specification "does not support a 'non-porous crystalline structure.'" Applicants disagree. As set forth in the specification in the "Background of the Invention" at page 2:

*in the case where plating is used to coat the gas separator with a metal having excellent corrosion resistance, it is difficult to form a sufficiently compact coating layer. In other words, pores are formed in the coating layer. As a result, even if the coating layer itself is formed from a noble metal having excellent corrosion resistance, a substrate portion of the separator covered with the coating layer is gradually corroded through the pores formed therein, whereby the overall corrosion resistance of the gas separator is reduced. In order to sufficiently suppress the effects of corrosion through the pores in the coating layer, it is necessary to form the coating layer with a larger thickness, resulting in increase in the amount of the noble metal to be used. Therefore, the use of such a method is not desirable.*

The "Summary of the Invention" then states:

*A fuel cell gas separator, a manufacturing method thereof and a fuel cell according to the invention are made to solve the aforementioned problems, and it is an object of the invention to implement sufficient corrosion resistance in a metal gas separator.*

In view of the above, and as further supported in the specification at pages 20-26, the specification clearly supports the fact that the invention aims at eliminating pores. There is in fact no other reasonable interpretation of the invention based at least on the quoted portions of the specification above, and on the specification at pages 20-26.

The layer having a porous or a non-porous crystalline structure is, as supported by the specification, closely related to grain size. A "porous crystalline" means a crystalline having a small grain size with pore generally. A "non-porous crystalline" means a crystalline having a large grain size without pore generally. The grain size and crystalline structure are described at pages 20-26 and in Fig. 7.

In view of the above, the Examiner is respectfully requested to reconsider and withdraw his rejection of the claims under the second paragraph of Section 112.

**II. Rejection under 35 USC 102(e)/35 USC 103(a).**

Claims 1, 4-13 and 16-26 have been rejected under Sections 102(e)/103(a) as being anticipated by/obvious over Yoshimura.

The Applicant respectfully submits that the present invention as claimed is allowable over Yoshimura for at least the reason that Yoshimura does not teach or suggest a metal coating layer having a non-porous crystalline structure comprising crystal grains having an average grain size of 0.1 mm or more, as required by independent claims 1 and 13. It is noted that the Examiner recognizes that Yoshimura is silent as to the claimed feature (Office Action, p. 5, lines 13 and 14). Moreover, the Applicant respectfully disagrees with the Examiner's remarks in connection with "only properties of an end product ... are given patentable weight" (Office Action, p. 5, lines 17-18). Specifically, it is not understood how the dimensions of constituent parts of a thing -- i.e., the claimed size of the claimed crystal grains -- *cannot* be considered to be a property of the thing. If *size* is not a property of a thing, the Applicant respectfully requests clarification as to what *is* a property of a thing. The Applicant in particular notes that the Examiner apparently considers size to be a property when it describes the metal coating layer (Office Action, p. 5, lines 17-18). Thus, it is unclear why size is not a property when it describes a constituent of the metal coating layer, as claimed.

In view of the foregoing, the Applicant respectfully submits that the claimed limitation as to "crystal grains having an average grain size of 0.1 mm or more" should be given patentable weight, and that in view of at least this limitation, independent claims 1 and 13 are allowable over Yoshimura. Moreover, dependent claims 4-12 and 16-26 are likewise allowable for at least the reason that each includes the features of one of independent claims 1 and 13.

Withdrawal of the rejection of claims 1, 4-13 and 16-26 under 35 USC 102(e)/35 USC 103(a) is therefore respectfully requested.


### III. Conclusion

In light of the above discussion, Applicant respectfully submits that the present application is in all aspects in allowable condition, and earnestly solicits favorable reconsideration and early issuance of a Notice of Allowance.

The Examiner is invited to contact the undersigned at (202) 220-4323 to discuss any matter concerning this application. The Office is authorized to charge any fees related to this communication to Deposit Account No. 11-0600.

Respectfully submitted,

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